

**REMARKS**

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

**I. CLAIM STATUS AND AMENDMENTS**

Claims 21-31 were pending in this application when last examined. Claims 12, 13, 15-17, 21, 23, 25, 26, 28 and 29 were examined on the merits and stand rejected. Claims 14, 18-20, 22, 24, 27, 30 and 31 were withdrawn as non-elected subject matter.

The present amendment amends claims 12, 15, 21 and 22, and adds new claims 32 and 33. The specification, for example, at page 17, and tables 1-2, and the original claims as filed, fully support the amended and new claims. Thus, no new matter has been added.

**II. WRITTEN DESCRIPTION REJECTION**

At page 2, item 2, the Office Action rejects claims 12, 13, 15-17, 21, 23, 25, 26, 28 and 29 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully traverse this rejection.

The rejection appears to concern the phrase "non-polymeric chains having antioxidant properties or properties for inhibiting reactions of degradation of said matrix" featured in independent claim 12.

Amended claim 12 no longer recites the phrase in question. Therefore, Applicants respectfully submit that the specification

provides full written description support for the complex matrix of claim 12, and for claims 13, 15-17, 21, 23, 25, 26, 28 and 29 which depend from claim 12. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

### **III. INDEFINITENESS REJECTIONS**

At page 4, item 4, the Office Action rejects claims 12, 13, 15-17, 21, 23, 25, 26, 28 and 29 under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Office Action holds the position that the claims feature non-polymeric chains that possess certain properties grafted to a polymer of natural origin, but polymeric compounds are exemplified as being part of this group. The Office Action maintains that enzymes, for example, can be protein-based and/or RNA based and as such the term "non-polymeric" encompasses one genera belonging to this category that is "polymeric" in nature. Applicants respectfully traverse this rejection.

Applicants recognize that enzymes comprise amino-acids and/or nucleotides; however, the skilled artisan would readily understand that enzymes differ from the polymers of the complex matrix which are homopolymers or copolymers of repetitive units of a few monomers. Nevertheless, in order to advance prosecution of the application, amended claim 12 no longer features grafted chains comprising non-polymeric chains. The skilled artisan would readily understand the metes and bounds of the noted claim

language. Claim 12, and dependent claims 13, 15-17, 21, 23, 25, 26, 28 and 29, satisfy the requirements of 35 U.S.C. § 112, second paragraph. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

The Office Action does not expressly indicate the status of the other two indefiniteness rejections set forth in the May 9, 2008 Office Action (page 9, item 9, and at page 10, item 10). Applicants assume that these rejections were overcome and withdrawn, thus, they are not addressed in this Amendment.

#### **IV. OBVIOUSNESS REJECTIONS**

At page 6, item 8, the Office Action rejects claims 12, 13 and 17 under 35 U.S.C. § 103(a) as obvious over NGUYEN (EP 0749982A). Applicants respectfully traverse the rejection.

Amended claim 12 is directed to a matrix comprising at least one biocompatible polymer of natural origin, cross linked with cross linking agent of a bi- or polyfunctional molecule, wherein the biocompatible polymer has grafted chains, each chain having a molecular weight less than 50,000 Da, and comprising polymers of natural origin of small size, and wherein the quantity of grafting is from 10% to 40%. NGUYEN fails to teach or suggest such a matrix.

NGUYEN describes grafted polysaccharide compositions comprising polysaccharides grafted with antioxidants, and their use in health care or cosmetics (see, Abstract). NGUYEN

addresses the problem of polysaccharide degradation by hydroxyl radicals (see, page 2, lines 37-40). The antioxidant grafted polysaccharide can also be crosslinked (see, page 2, lines 50-51, and page 4, lines 50-59). NGUYEN describes a minimal grafting level as low as 1 equivalent of antioxidant per 1000 equivalents of polysaccharide repeating units, and a maximum level as high as 1 equivalent of antioxidant per 10 equivalents of polysaccharide repeating units (see, page 5, lines 11-18).

The teachings of NGUYEN, however, are limited to polysaccharides grafted with antioxidants. NGUYEN fails to teach or suggest any composition that includes a biocompatible polymer having grafted chains, each chain having a molecular weight less than 50,000 Da and comprising polymers of natural origin of small size, as featured in independent claim 12.

For at least this reason, NGUYEN fails to teach or suggest, and would not have rendered obvious, a matrix having the combination of features recited in claim 12. Claims 13 and 17 each depend from claim 12 and for at least the same reason also would not have been rendered obvious. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

At page 8, item 9, the Office Action rejects claims 12, 13, 16, 23, 26 and 29 under 35 U.S.C. § 103(a) as obvious over NGUYEN in view of RAMAMURTHI (J. Biomed. Mater. Res., 2002). Applicants respectfully traverse the rejection.

Claim 13, 16, 23, 26 and 29 each depend from claim 12. As detailed in the comments above, NGUYEN fails to teach or suggest any composition that includes a biocompatible polymer having grafted chains, each chain having a molecular weight less than 50,000 Da and comprising polymers of natural origin of small size, as featured in independent claim 12. RAMAMURTHI also fails to teach or suggest any such composition and fails to remedy the deficient teachings of NGUYEN. For at least this reason, NGUYEN and RAMAMURTHI, alone or in combination, fail to teach or suggest, and would not have rendered obvious, a matrix having the combination of features recited in claim 12, and claims 13, 16, 23, 26 and 29 dependant thereon. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

At page 9, item 10, the Office Action rejects claims 12, 13, 15 and 21 under 35 U.S.C. § 103(a) as obvious over NGUYEN in view of BOLOTIN (PGPub 2003/0224974). Applicants respectfully traverse the rejection.

Claim 13, 15 and 21 each depend from claim 12. As detailed in the comments above, NGUYEN fails to teach or suggest any composition that includes a biocompatible polymer having grafted chains, each chain having a molecular weight less than 50,000 Da and comprising polymers of natural origin of small size, as featured in independent claim 12. BOLOTIN also fails to teach or suggest any such composition and fails to remedy the

deficient teachings of NGUYEN. For at least this reason, NGUYEN and BOLOTIN, alone or in combination, fail to teach or suggest, and would not have rendered obvious, a matrix having the combination of features recited in claim 12, and claims 13, 15 and 21 dependant thereon. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

At page 9, item 11, the Office Action rejects claims 12, 15, 25 and 28 under 35 U.S.C. § 103(a) as obvious over NGUYEN in view of BOLOTIN and RAMAMURTHI. Applicants respectfully traverse the rejection.

Claim 15, 25 and 28 each depend from claim 12. As detailed in the comments above, NGUYEN fails to teach or suggest any composition that includes a biocompatible polymer having grafted chains, each chain having a molecular weight less than 50,000 Da and comprising polymers of natural origin of small size, as featured in independent claim 12. BOLOTIN and/or RAMAMURTHI also fail to teach or suggest any such composition and fail to remedy the deficient teachings of NGUYEN. For at least this reason, NGUYEN BOLOTIN and/or RAMAMURTHI, alone or in combination, fail to teach or suggest, and would not have rendered obvious, a matrix having the combination of features recited in claim 12, and claims 15, 25 and 28 dependant thereon. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

**V. CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

The fee of \$104.00 for the extra dependent claims added is being paid online simultaneously herewith by credit card.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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